

REMARKS

Applicants have reviewed and considered the Office Action dated May 12, 2008. In the Office Action, the Examiner rejected claims 1, 22, 23, and 36 under 35 U.S.C. §102(b) and rejected claims 1, 22, and 23 under 35 U.S.C. §103(a). The rejections are traversed and reconsideration and allowance are respectfully requested at least for the reasons discussed below.

Rejection under 35 U.S.C. § 102(b)

Claims 1, 22, 23, and 36 were rejected under 35 U.S.C. § 102(b) as being anticipated by McKinney (US 5,167,665). This rejection is traversed at least for the following reasons.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *MPEP* § 2137.

As discussed more fully below, McKinney does not disclose, teach, or suggest a fastener comprising, among other things, “a first portion ... having a curved cylindrical body” and “a second portion ... having a curved cylindrical body wherein the second portion is displaceable relative to the first portion” and “wherein the curved cylindrical body of the second portion is slidingly disposed within and extending substantially throughout the curved cylindrical body of the first portion,” as recited by claim 1. McKinney further does not disclose, teach, or suggest a method for operating a bone fastener comprising, among other things, “displacing a second portion ... through and within the first portion such that an enlarged distal end of the second portion abuts a distal end of the first portion ... wherein each of the first and second portions have a curved cylindrical body and wherein the curved cylindrical body of the second portion is slidingly disposed within and extending substantially throughout the curved cylindrical body of the first portion,” as recited by claim 36.

A. McKinney does not disclose teach or suggest a “first portion having a curved cylindrical body” or a “second portion having a curved cylindrical body.”

In framing his rejection, the Examiner asserts:

McKinney discloses a device comprising a first portion (19) capable of extending through multiple bone fragments and a second portion (23 and 39) capable of being displaced relative to

the first portion and capable of being detachably coupled therewith in a locked position to secure bone fragments.

Current Office Action, page 3. Element 19 of McKinney is a rivet body. McKinney describes:

The rivet body 19 has a shank 25 and a head 33. The shank 25 is a cylindrical tube. The shank 25 has first and second ends 29, 31. The head 33 is integral with the first end 29 of the shank 25. The head 33 extends transversely out from the shank. The head 11 has an engaging surface 35 that faces the second end 31 of the shank. In the embodiment shown in FIG. 3, the engaging surface 35 is smooth and flat. The body 19 has an interior passage (not shown) extending from the shank second end 31 to the head 33. The interior passage receives the mandrel 23.

McKinney, Col. 3, ll. 50-50. Elements 23 and 39 of McKinney are a mandrel and a bead of the mandrel. McKinney describes:

The mandrel 23 is a shaft that extends through the body 19. One end of the mandrel has a bead 39 that is located adjacent to the shank second end 31. The bead 39 has a diameter that is larger than the inside diameter of the shank. The other end 41 of the mandrel 23 is free so as to be received by a rivet gun 47 (see FIG. 4). The body 19 is secured to the mandrel 23 so that sliding the body along the mandrel and rotating the body on the mandrel is difficult. The mandrel is believed to have a weakened portion located near the bead 39. This weakened portion allows the mandrel to separate from the bead and the body during installation of the rivet.

Figure 3 of McKinney illustrates the rivet body 19 and mandrel 23. As shown, the rivet body 19 and the mandrel 23 are linear and have substantially no curvature.

The Examiner appears to have anticipated this point and argues:

McKinney discloses a device wherein the first portion includes a curved cylindrical body. The examiner is interpreting the first portion of the device includes a curved surface (33) on the cylindrical body, which the examiner believes read on the curved cylindrical body limitation of claim 1. The examiner notes the reference number 33 designates the head of the body of the device, but the examiner is using the reference number to direct the applicant to the area of the first portion having the curved surface. McKinney discloses a device wherein the second portion of the device includes a curved cylindrical body, wherein the cylindrical

body of the second body is slidably disposed within and extending substantially throughout the cylindrical body of the first portion. The examiner is interpreting the second portion of the device includes a curved surface (39), which the examiner believes reads on the curved body limitation of claim 1. The examiner notes that reference number 39 designates the bead of the mandrel of the device, but the examiner is using the reference number to direct the applicant to the area of the second portion having the curved surface. Therefore, the first portion and the second portion are cylindrical bodies having a curved surface, i.e. a curved cylindrical body. The cylindrical body of the second portion extends substantially throughout the cylindrical body of the first portion.

Current Office Action, page 3.

“[T]he meaning of a prior art reference requires analysis of the understanding of an artisan of ordinary skill To anticipate, ‘[t]here must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention.’” *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323 (Fed. Cir. 2008) (quoting *Scripps Clinic & Res. Found. v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991)). Furthermore, “variations, scarcely noticeable to a common reader, would be detected by an expert in the art.” *Bischoff v. Wethered*, 76 U.S. 812, 815, 19 L. Ed. 829 (1870).

McKinney explicitly describes the rivet body 19 as having a cylindrical shank 25 and a head 33. The Examiner attempts to construe the rivet body as a curved cylindrical body by combining the cylindrical shank 25 with a curved surface of the head 33. The Applicants respectfully submit that an element including two portions, one of which is cylindrical and another of which is curved does not anticipate an element that is curved and cylindrical. Similarly, the Examiner attempts to construe a mandrel having a shaft and a bead 39 as a cylindrical body by combining the generally cylindrical shaft 19 with a curved surface of the bead 39. The Applicants again respectfully submit that an element including two portions, one of which is cylindrical and another of which is curved does not anticipate an element that is curved and cylindrical. One reasonably skilled in the art would understand the difference between a curved cylindrical body and a cylindrical shank having a curved head or a cylindrical shaft having a curved bead.

The Applicants thus respectfully submit that McKinney does not disclose, teach, or suggest, a “first portion having a curved cylindrical body” or a “second portion having a curved cylindrical body,” both as recited by claim 1 or “wherein each of the first and the second portions have a curved cylindrical body,” as recited by claim 36.

B. McKinney does not disclose, teach, or suggest “wherein the curved cylindrical body of the second portion is slidably disposed within and extending substantially throughout the curved cylindrical body of the first portion.”

Even were one to accept the Examiner’s construction of McKinney, McKinney still would not disclose “wherein the curved cylindrical body of the second portion is slidably disposed within and extending substantially throughout the curved cylindrical body of the first portion,” as recited by claims 1 and 36. Following the Examiner’s construction, element 33 of McKinney is a first portion having a curved cylindrical body and element 39 of McKinney is a second portion having a curved cylindrical body. As shown in Figure 3, element 33 and element 39 of McKinney are separated by the cylindrical shaft 19. While it is possible that element 39 is slid through element 33 to configure the device, element 39 is not “slidably disposed within and extending substantially throughout” element 33.

C. McKinney does not disclose, teach, or suggest “a first portion configured to extend through the multiple bone fragments.”

The rivet of McKinney is designed to attach objects to bone. *McKinney*, Abstract. The rivet is not configured to “extend through multiple bone fragments,” as recited by claim 1. Notwithstanding the Examiner’s conclusory statement that “McKinney discloses a device comprising a first portion (19) capable of extending through multiple bone fragments,” it is not apparent from the teachings of McKinney how it *could* extend through multiple bone fragments. The Applicants respectfully request the Examiner to provide support for such statement. Given no explicit disclosure, the Applicants infer that the Examiner is asserting that McKinney inherently discloses that the rivet could extend through multiple bone fragments. MPEP 2112 discusses that for a rejection based on inherency to be proper, the prior art must always have the inherent element. The mere possibility that the element could occur is not enough:

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. ... "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' "

MPEP 2112 IV, (citations omitted). The Applicants respectfully submit that, even if the device of McKinney could possibly extend through multiple bone fragments, it would not in all instances and such configuration necessarily be the case. Given the lack of explicit disclosure and the lack of support for an inherency argument, the Applicants respectfully submit that McKinney cannot support an anticipation rejection at least because it does not show "a first portion configured to extend through the multiple bone fragments," as recited by claim 1.

D. Conclusion for Claims 1, 22, 23, and 36.

McKinney does not disclose, teach, or suggest a "first portion having a curved cylindrical body" or a "second portion having a curved cylindrical body," both as recited by claim 1, or "wherein each of the first and the second portions have a curved cylindrical body," as recited by claim 36. McKinney does not disclose, teach, or suggest "a first portion configured to extend through the multiple bone fragments," as recited by claim 1. McKinney further does not disclose, teach, or suggest "wherein the curved cylindrical body of the second portion is slidably disposed within and extending substantially throughout the curved cylindrical body of the first portion," as recited by claims 1 and 36. Claims 1 and 36 are thus allowable over McKinney. Claims 22 and 23 depend from claim 1 and are allowable at least for the reasons discussed with respect thereto. Reconsideration and allowance are thus respectfully submitted.

Rejection under 35 U.S.C. § 103(a)

Claims 1, 22, and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Siekierski (US 6,470,709). This rejection is traversed at least for the following reasons.

As discussed more fully below, Siekierski does not disclose, teach, or suggest a fastener comprising, among other things, “a first portion ... having a curved cylindrical body” and “a second portion ... having a curved cylindrical body wherein the second portion is displaceable relative to the first portion” and “wherein the curved cylindrical body of the second portion is slidingly disposed within and extending substantially throughout the curved cylindrical body of the first portion,” as recited by claim 1.

A. Siekierski does not disclose teach or suggest a “second portion having a curved cylindrical body”

In framing his rejection, the Examiner asserts:

Siekierski discloses a device comprising a first portion capable of extending through multiple bone fragments and a second portion capable of being displaced relative to the first portion and capable of being detachably coupled therewith in a locked position to secure multiple bone fragments (see Figure 1 below). Siekierski discloses a device wherein the first portion includes a curved cylindrical body. The examiner is interpreting the cylindrical body of the first portion having a curved surface, which the examiner believes read on the limitations of claim 1. Siekierski discloses a device wherein the second portion includes a curved cylindrical body, wherein the cylindrical body is slidingly disposed within and extending through the curved cylindrical body of the first portion. The examiner is interpreting the cylindrical body of the second portion having a curved surface, which the examiner believes read on the limitations of claim 1.

Current Office Action, pages 4-5. The Examiner included a marked up version of Siekierski Figure 1 to illustrate his interpretation of Siekierski. In that mark-up, the Examiner indicated partial ring 164 as a first portion and stem piece 170 and ball end 168 of end piece 162 together as the second portion and, particularly, ball end 168 as a curved surface.

As shown in Figures 14 and 15 of Siekierski, the stem piece 170 is substantially straight and the ball piece is curved. As with his construction of the McKinney patent, the Examiner attempts to construe the jewelry connector assembly of Siekierski as having a second portion having a curved cylindrical body by combining a cylindrical stem piece 170 with a curved ball piece 168. The Applicants respectfully submit that an element including two portions, one of

which is cylindrical and another of which is curved does not anticipate an element that is curved and cylindrical.

Siekierski describe the stem piece 170 as follows:

A stem piece is made on a high modulus elasticity material, such as a Titanium or a spring steel (as shown with a negligible degree of bend-straight) such that when it is inserted into the end opening 172 so that it follows the central passage 174 of the partial ring piece 164 as it elastically deforms. FIG. 15 shows the end piece 162 inserted to the base of the ball 168. The elastic stem 170 has been bent by the curvature of the internal passage 174 to have a sideways high contact force at locations 180, 182, 184.

Siekierski, Col. 9, ll. 19-27. Accordingly, the stem piece 170 of Siekierski is substantially straight until inserted into the partial ring 164.

B. Siekierski does not disclose teach or suggest “wherein the curved cylindrical body of the second portion is slidingly disposed within and extending substantially throughout the curved cylindrical body of the first portion.”

Extension of the stem 170 into the internal passage 174 of partial ring 164 is only for a sufficient distance to ensure bending of the stem to create a binding/retaining force:

The stem 170 extends for longitudinal distance 176 (also known as "A") into the internal passage 174. An end view of the opening 172 in the end of the partial ring 174 is shown by the end view 186 which is a circle. The end view of the internal passage 174 for the distance 176 from the end opening 172 is shown by the end view of 188 which is an elongated ellipse. Thus, the bending of the stem piece 170 as it is inserted due to the curvature of the internal passage creates a binding/retaining force to hold the end piece and its ball 168 in position.

Siekierski, Col. 9, ll. 28-37. As shown in Figure 15, distance 176 is a relatively small length of the partial ring 164, less than approximately 25% of the length of the partial ring 164.

The Examiner states:

The Examiner would like to note, the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

Current Office Action, page 5. The Applicants respectfully submit that the extension of the stem piece 170 a length A into the partial ring 164, less than approximately 25% of the total length of the partial ring and the extension of the curved cylindrical body of the second portion “substantially throughout the curved cylindrical body of the first portion,” as recited by claim 1 is more than a difference of relative dimensions. As explained by Siekierski, the stem piece 170 has a negligible degree of bend and is substantially straight prior to insertion into the partial ring 164. The stem piece elastically deforms to create a binding/retaining force. It is not apparent from the teachings of Siekierski that it would even be possible, much less desirable, to insert a substantially straight stem piece 170 into the partial ring 164 such that it extends “substantially throughout” the partial ring. In contrast, as claimed, the second portion of the fastener extends substantially throughout the first portion of the fastener to secure the multiple bone fragments.

C. Conclusion for Claims 1, 22, and 23.

Siekierski does not disclose, teach, or suggest a “second portion having a curved cylindrical body” or “wherein the curved cylindrical body of the second portion is slidingly disposed within and extending substantially throughout the curved cylindrical body of the first portion,” both as recited by claim 1. Claim 1 is thus allowable over Siekierski. Claims 22 and 23 depend from claim 1 and are allowable at least for the reasons discussed with respect thereto. Reconsideration and allowance are thus respectfully submitted.

Conclusion


This application now stands in allowable form and reconsideration and allowance is respectfully requested.

This response is being submitted on or before October 12, 2008, with the required fee for a two-month extension of time, making this a timely response. It is believed that no additional fees are due in connection with this filing. However, the Commissioner is authorized to charge any additional fees, including extension fees or other relief which may be required, or credit any overpayment and notify us of same, to Deposit Account No. 04-1420.

Respectfully submitted,

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